UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,869	10/04/2005	Toshiyasu Higuma	018760-022	2255

21839 7590 08/13/2009
BUCHANAN, INGERSOLL & ROONEY PC
POST OFFICE BOX 1404
ALEXANDRIA, VA 22313-1404

EXAMINER	
RECEK, JASON D	

ART UNIT	PAPER NUMBER
2442	

NOTIFICATION DATE	DELIVERY MODE
08/13/2009	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

Office Action Summary	Application No.	Applicant(s)	
	10/529,869	HIGUMA ET AL.	
	Examiner	Art Unit	
	JASON RECEK	2442	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 May 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-16* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This is in response to the amendment filed on May 26th 2009.

Status of Claims

Claims 1-16 are pending but rejected under 35 U.S.C. 103(a).

Response to Arguments

1. Applicant's arguments, see pg. 14-16, filed 5/26/09, with respect to the rejection(s) of claim(s) 1 under 103(a) have been fully considered and are persuasive. Specifically, the argument that Van der Meulen does not disclose a "power supply managing means that manages a state of power of the communication adapter apparatus, and controls an operation ... in accordance with a state of the power supply" as now recited by claim 1 is persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Abdulkarim US 2003/0088796 A1.

2. Applicant's arguments concerning claims 13-16 (pg. 16-17) have been fully considered but they are not persuasive. Applicant argues that Howard does not disclose "on the basis of a response returned from the home appliance ... selecting driver software of the serial input/output system". To support this argument applicant

relies upon the specification and states that Howard does not disclose the above limitation because it does not disclose selecting a driver software based upon a voltage signal received (pg. 17). This argument is arguing features not in the claims. The claims merely require a response, they do not require receiving a voltage signal. Howard does disclose receiving a response and selecting translator software (col. 5 ln. 15-50, col. 6 ln. 38-45, Fig. 5 steps 88-90). Thus it discloses this limitation as recited by the claims.

3. Applicant's arguments regarding claim 12 have been fully considered but are not persuasive. Applicant argues that Howard does not disclose selecting driver software based on supplied voltage information (pg. 18). Examiner agrees with this statement. Applicant also argues that the newly added limitation "based on the supplied voltage information" is not disclosed by Fritsche because Fritsche merely discloses identifying a device based on voltage information (pg. 18). It is respectfully submitted that applicant is misinterpreting Fritsche, the summary of Fritsche (col. 2 ln. 5-45) discloses identifying a device by voltage information and using that information to load data for the operation of that device (i.e. select driver software). Thus Fritsche does disclose this portion of the claim. Even if applicant disagrees whether Fritsche discloses selecting driver software based on the supplied voltage information, the combination of these references teaches this limitation. Howard teaches selecting driver software based on upon device identification and Fritsche clearly teaches identifying devices based upon a voltage signal (col. 2 ln. 5-10). See the rejection below for a complete explanation.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howard et al. US 6,728,804 B1 in view of Van der Meulen US 6,906,617 B1 and Abdulkarim US 2003/0088796 A1.

Regarding claim 1, Howard discloses "A communication adapter (col. 3 ln. 40-42, Fig. 1), "communication control means" as a communication module (col. 3 ln. 53-60), "communication managing means that copies and saves the apparatus object" as an adapter with memory (col. 3 ln. 45-47, Fig. 1 item 24), "makes it possible to use the connection object apparatus from the network" (col. 2 ln. 39-44), and "apparatus interface means" as a communication port that enables communication with the devices (col. 3 ln. 54-56).

Howard does not explicitly disclose "power supply managing means" however this is taught by Van der Meulen as a power supply managing means that manages a state of power (col. 3 ln. 32-49, Fig. 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Howard by providing power management as taught by Van der Meulen for the purpose of automation. Van der

Meulen teaches that monitoring power provides a user with greater control over the appliances that are connected (col. 2 ln. 1-17).

The combination of Howard and Van der Meulen does not explicitly disclose that the power managing means "manages a stat of power supply of the communication adapter apparatus, and controls an operation of at least one of the communication control means ... in accordance with a state of the power supply" however this is taught by Abdulkarim (paragraphs 24, 39, 41, Fig. 2). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the combination of Howard and Van der Meulen to manage the power of the communication adapter as taught by Abdulkarim. Abdulkarim suggests a power management system should be able to manage power consumption of all subsystems (i.e. communication adapter) for the purpose of reducing power consumption in response to environmental regulations or other conditions (paragraphs 4-5).

Regarding claim 2, Howard does not explicitly disclose "manages a charged capacity inside an adapter" or "the communication control means to limit communication according to a management state of the power supply managing means" however these are taught by Van der Meulen as a power supply managing means (col. 3 ln. 32-49, Fig. 2) and communicating only during certain periods (col. 3 ln. 60-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Howard by providing power management as taught by Van der Meulen for the purpose of automation. Van der Meulen teaches that monitoring power

provides a user with greater control over the appliances that are connected (col. 2 ln. 1-17).

Regarding claim 3, Howard does not explicitly disclose "the apparatus communication managing means to limit accesses to the apparatus object according to a management state of the power supply" however this is taught by Van der Meulen as a system which only communicates during certain power states (col. 5 ln. 12-18).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Howard by providing power management as taught by Van der Meulen for the purpose of automation. Van der Meulen teaches that monitoring power provides a user with greater control over the appliances that are connected (col. 2 ln. 1-17).

Regarding claim 4, Howard discloses "an apparatus interface access unit that is usable according to a procedure common to the connection object apparatuses" as a communication port that enables communication with the devices, since the port is capable of communicating, it is inherent that it is usable with the apparatuses (col. 3 ln. 54-56, col. 4 ln. 64-67), "apparatus control access unit" that is likewise usable (col. 4 ln. 67 – col. 5 ln. 3) and "permitting/prohibiting means that permits or prohibits an access to the apparatus" as an adapter that provides means to control the device (col. 6 ln. 64 - col. 7 ln. 5), one skilled in the art would understand controlling to include permitting/prohibiting access.

Regarding claim 5, it recites some of the same language as claim 4 and that language is rejected for the same reasons. Howard also discloses "object managing means" as the apparatus understands object-oriented program code (col. 5 ln. 50-58), "state acquisition procedure setting means" as variables that may be set according to the state of a device such as light on (col. 5 ln. 59-67), "installation information managing means" as providing new program code when a new device is identified (col. 6 ln. 30-42), "network attribute managing means" as an adapter that is capable of communication on a network must have the necessary means to manage that communication (col. 3 ln. 58-62), and "network band managing means" as a communication module that handles network communication (col. 5 ln. 1-3).

Regarding claim 6, Howard discloses "generates an imaginary apparatus object on the basis of a setting command" as the adapter can create an object to represent a device (col. 6 ln. 1-14), it is not necessary that the device be connected before the object is created.

Regarding claim 7, it recites some of the language from claims 4 and 6, that language is rejected for the same reasons. Howard also discloses "the apparatus communication managing means ... performs operation and setting for this imaginary apparatus and acquisition of a state" as the adapter controls the object and thus is able to perform state acquisition and setting of variables (col. 5 ln. 59-62), and "performs

setting for running and stop of the apparatus object and acquisition of a state" as controlling the object (col. 6 ln. 5-14).

Regarding claim 8, it recites some of the language from claim 4, that language is rejected for the same reasons. Howard also discloses "a database that holds installation information" as memory (col. 3 ln. 42) that holds database information (col. 5 ln. 40-41), "writing/reading means" are also disclosed (col. 7 ln. 37-39).

Regarding claim 9, it recites some of the language from claim 4, that language is rejected for the same reasons. Howard also discloses "abnormality notifying means" as a monitor function that provides monitoring information to the network (col. 7 ln. 2-4, 42-45).

Regarding claim 10, Howard does not explicitly disclose "provides the connection object apparatuses with the abnormality information when data transmission through the network is impossible" however it would have been obvious to one of ordinary skill in the art at the time of the invention that if one line of communication is not in use (i.e., the network), another line of communication should be tried.

Regarding claim 11, it is a combination of claims 2 and 4, therefore it is rejected for similar reasons.

3. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Howard and Fritsche et al. US 6,567,007 B1.

Regarding claim 12, Howard discloses "A communication adapter" (col. 3 ln. 41-42), "input/output interface" and "network interface" (col. 3 ln. 53-54, Fig. 1), "a CPU" and "storage" (col. 3 ln. 46-47, Fig. 1), "pieces of driver software for controlling hardware" as program code (col. 5 ln. 15-18), and "selects driver software corresponding to the input/output system" as identifying the device and selecting the appropriate software (col. 6 ln. 38-42).

Howard does not explicitly disclose "distinguishes an input/output system for the home appliance on the basis of voltage information supplied from the home appliance ... and selects driver software corresponding to the input/out system based on the supplied voltage information" however this is taught by Fritsche as identifying a device based on voltage information (col. 2 ln. 5-18, col. 6 ln. 17-55) and loading data (i.e. driver) for the operation of that device (col. 2 ln. 31-38).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Howard with the teachings of Fritsche for the purpose of identifying a device by voltage information. Howard suggests there are multiple ways to identify a device (col. 6 ln. 29-48), incorporating the teachings of Fritsche simply adds an additional method for identification.

4. Claims 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Howard et al. US 6,728,804 B1 in view of Van der Meulen US 6,906,617 B1.

Regarding claim 13, it recites some of the language from claim 12, that language is rejected for the same reasons.

Howard also discloses "the storage has plural pieces of driver software that directly controls hardware of the input/output interface" as a translator module that contains computer program instructions for communicating and controlling the device (col. 5 ln. 15-35), and "on the basis of a response returned from the home appliance ... selecting driver software of the serial input/output system" as receiving a response and selecting translator software (col. 5 ln. 15-50, col. 6 ln. 38-45, Fig. 5 steps 88-90).

Howard does not explicitly disclose "supplies a clock signal from the communication adapter" however this is taught by Van der Meulen as a power connection which supplies a synchronous signal (col. 3 ln. 40-46, Fig. 2).

It is also noted that Howard teaches that a device may be a personal computer system (col. 4 ln. 26-30) and depending on the type of network used (col. 4 ln. 5-10) a clock signal may be present between devices. A communication network that contains clock signals is well known in the art. It would have been obvious to one of ordinary skill in the art to use such a network with the system of Howard to produce predictable results.

Regarding claim 14, it recites some of the language from claims 12 and 13, that language is rejected for the same reasons. Howard also discloses "selects driver software held by the storage on the basis of a communication frame that is sent from an electrical apparatus" as identifying a device based on communication received from it (col. 6 ln. 30-40).

Regarding claim 15, it recites some of the language from claims 12 and 13, that language is rejected for the same reasons. Howard also discloses "storage holds attribute information" (col. 6 ln. 11-12) and "which can be monitored, controlled and set" (col. 6 ln. 66-67). These limitations are also disclosed by the summary of Howard as an adapter that contains updateable memory, such memory holds an object or identification of a device (col. 1 ln. 60 – col. 2 ln. 25). Howard does not explicitly disclose that the object or identification of the device comprises model names, and power consumption however it would have been obvious to one of ordinary skill in the art to include these. The process of identifying something includes attaching a name and other defining characteristics.

Regarding claim 16, , it recites some of the language from claim 15, that language is rejected for the same reasons. Howard also discloses "the communication adapter selects one piece of the attribute information on the basis of a communication frame sent from an electrical apparatus" as the adapter updates attribute information with information sent over the network (col. 7 ln. 33-36).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Lee et al. US 2004/0088590 A1 discloses managing the power state of a network interface (abstract).

Hernandez et al. US 2003/0210658 A1 discloses a power management scheme that controls the power state of a network interface (paragraph 3)

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JASON RECEK whose telephone number is (571)270-1975. The examiner can normally be reached on Mon - Fri 9:00am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Andrew Caldwell/
Supervisory Patent Examiner, Art Unit 2442

/Jason Recek/
Examiner, Art Unit 2442
(571) 270-1975